



June 30, 2020

**Via Electronic Mail**

Division of Water Quality  
Permit Administration Section  
New Jersey Department of Environmental Protection  
Mail Code: 401-02D, PO Box 420  
Trenton, NJ 08625-042

**Re: New Jersey Pollution Discharge Elimination System (NJPDES) Discharge to  
Surface Water Permit Application  
Category B4B Permit (General Petroleum Product Cleanup)  
Hess Corporation - Former Port Reading Refinery, AOC-3: No. 1 Landfarm  
750 Cliff Road  
Port Reading, Middlesex County, New Jersey 07064  
NJDEP PI #: 006148  
ISRA Case #: E20130449  
EPA ID #: NJD045445483**

To Whom It May Concern:

Earth Systems, Inc., on behalf of Hess Corporation, is submitting the enclosed New Jersey Pollution Discharge Elimination System (NJPDES) Permit Application and associated documents for the above-referenced facility.

Please feel free to contact me at (732) 739-6444 or [bwilliams@earthsys.net](mailto:bwilliams@earthsys.net) if you have any questions or require additional information. You can also contact Mr. John Schenkewitz of Hess Corporation at [jschenkewitz@hess.com](mailto:jschenkewitz@hess.com) or (609) 406-3969.

Sincerely,  
Earth Systems, Inc.

A handwritten signature in black ink, appearing to read "Bill Williams".

Bill Williams  
Project Manager

Cc: Mr. Phil Cole, NJDEP (electronic copy)  
Mr. Andrew Park, USEPA (electronic copy)  
Mr. John Schenkewitz, Hess Corporation (electronic copy)  
Mr. Rick Ofsanko, Earth Systems, Inc. (electronic copy)  
Mr. John Virgie, Earth Systems, Inc. (electronic copy)  
Mr. Albert Roscioli, Rubicon Environmental (electronic copy)

# **New Jersey Pollution Discharge Elimination System (NJPDES) Discharge to Surface Water Permit Application**

## **Category B4B (General Petroleum Product Cleanup)**

**Hess Corporation - Former Port Reading Refining Facility  
AOC-3: No. 1 Landfarm  
750 Cliff Road  
Port Reading, Middlesex County, New Jersey  
ISRA Case # E20130449  
NJDEP PI # 006148  
EPA ID # NJD045445483**

**June 2020**

**Prepared For:  
New Jersey Department of Environmental Protection  
Division of Water Quality  
Permit Administration Section  
401 East State Street  
Trenton, New Jersey 08625**

On Behalf Of:

**HESS Corporation**  
*Trenton-Mercer Airport  
601 Jack Stephan Way  
West Trenton, New Jersey 08628*

Prepared By:

 **Earth Systems**  
Environmental Engineering  
*1625 Highway 71  
Belmar, New Jersey 07719*



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## **Item 1**

### **Request for Authorization (RFA) Checklist**





# New Jersey Department of Environmental Protection

## Division of Water Quality

### REQUEST FOR AUTHORIZATION (RFA) CHECKLIST GENERAL SURFACE WATER PERMITS

Category CG - General Non-Contact Cooling Water Permit (NJ0070203)

Category B4B - General Groundwater Petroleum Product Clean-Up Permit (NJ0102709)

Category BGR - General Groundwater Remediation Cleanup Permit (NJ0155438)

**To Help Us Process Your RFA More Efficiently, Please Provide All Items Listed Below.**

This checklist is provided to you as guidance for completing an application for a Request for Authorization (RFA) under one of the permits listed above.

Should you have any questions, please contact the Bureau of Surface Water Permitting at (609) 292-4860. Be sure to read all instructions and answer all questions when filling out the following RFA forms. If an item is not applicable, enter "N/A" or a similarly appropriate response.

- ☒ **FORM NJPDES-1** - Instructions are provided with the form.
- ☐ **CG Supplemental Form** - Instructions are provided with the form. Please include attachments as described on the form. Needs to be submitted only if you are requesting authorization under NJPDES permit NJ0070203.
- ☒ **B4B Supplemental Form** - Instructions are provided with the form. Please include attachments as described on the form. Needs to be submitted only if you are requesting authorization under NJPDES permit NJ0102709.
- ☐ **BGR Supplemental Form** - Instructions are provided with the form. Please include attachments as described on the form. Needs to be submitted only if you are requesting authorization under NJPDES permit NJ0155438.

**Attachments as described on the CG, B4B and BGR Supplemental Forms. Instructions are provided on the form.**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Facility Diagram       | <input checked="" type="checkbox"/> Public Notice  |
| <input checked="" type="checkbox"/> Treatment Flow Diagram | <input type="checkbox"/> Form R – BGR Only   |
| <input checked="" type="checkbox"/> USGS Topographical Map | <input checked="" type="checkbox"/> Evidence of Submission To Municipality & Sewer Authority |
| <input checked="" type="checkbox"/> Contaminant Lab Data   |  |

**Item 2**

**NJDEP Forms**



**State of New Jersey**  
**Department of Environmental Protection**  
**Division of Water Quality**



**New Jersey Pollutant Discharge Elimination System Permit Application**

*Refer to the attached Instructions and the Appropriate Completeness Checklist and Provide All Applicable Information.  
Please Print or Type. (Attach additional sheets if necessary)*

**1. REQUESTED NJPDES PERMIT ACTION**

NJPDES PERMIT NUMBER	DISCHARGE CATEGORY CODES		EXPIRATION DATE	NEW	RENEW	REVOKE/ REISSUE	MODIFICATION
	CURRENT	REQUESTED					
NJ0102709	--Select--	B4B		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	--Select--	--Select--		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2. PERMITTEE/OPERATING ENTITY**

Permittee/Entity Name: Hess Corporation Federal Tax Id#: 13-4921002

Mailing Address: Trenton-Mercer Airport, 601 Jack Stephan Way

City or Town: West Trenton State: NJ Zip Code: 08628

Contact Person: John Schenkewitz Title: Senior Advisor, EHS

Telephone: (609) 406-3969 Email: jschenkewitz@hess.com

Parent Corporation & Place of Incorporation: \_\_\_\_\_

Ownership Type: ☐ City/Town ☐ County ☐ Utility, Authority, or Commission ☐ State ☐ Federal

☐ Public School District K-12 ☐ Religious/Charitable Organization ☒ Private

☐ Other \_\_\_\_\_

**3. PROPERTY/LAND OWNER(S)**

Entity Name: Buckeye Partners, LP

Mailing Address: Five Tek Park, 9999 Hamilton Blvd.

City or Town: Breinigsville State: PA Zip Code: 18031

Contact Person: Krista Snyder Manley Title: Manager, Remediation

Telephone: \_\_\_\_\_ Email: kmanley@buckeye.com

**4. LOCATION OF FACILITY/SITE**Name of Facility/Site: Hess Corporation - Former Port Reading Refinery, AOC 3: No. 1 LandfarmStreet Address/Location: 750 Cliff RoadCity or Town: Port Reading State: NJ Zip Code: 07064Municipality: Woodbridge County: Middlesex Block(s): 760.02 Lot(s): 1

Mailing Address (if different than facility street address): \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**5. INDUSTRIAL CLASSIFICATION CODE(S)**

TYPE	SIC CODE #	NAICS CODE #	PRODUCTS OR SERVICES PROVIDED BY FACILITY/SITE
Primary		493190	Other Warehousing and Storage
Auxiliary			
Auxiliary			
Auxiliary			

**6. PROJECT AND DISCHARGE DESCRIPTION (Under This Application)**

Permit to allow for treated discharge from dewatering associated with the remediation of the RCRA regulated No. 1 Landfarm to the adjacent municipal North Drainage Ditch, classified as SE2, tributary to the Arthur Kill. Water will be treated and discharged into the North Drainage Ditch as needed associated with remediation activities. Flow rate will be monitored via meter.

**7. OTHER NJPDES PERMITS ASSOCIATED WITH THIS FACILITY**

NJPDES PERMIT NUMBER	DISCHARGE CATEGORY CODE(S)	EXPIRATION DATE	PENDING
NJ0225720	B4B	12/31/2023	<input type="checkbox"/>
	--Select Category or Enter Manually --		<input type="checkbox"/>

**8. OTHER NON-NJPDES PERMITS**

If any of the following applications have been submitted for this facility/site, complete the applicable information.

Permit Type	Application No. (if assigned)	Application Status		
		Approval Date	Denial Date	Pending
● Hazardous Waste Management Program under RCRA	NJ0028878	01/01/1985		<input type="checkbox"/>
● Prevention of Significant Deterioration (PSD)				<input type="checkbox"/>
● Nonattainment Program, Clean Air Act				<input type="checkbox"/>
● National Emission Standards - Hazardous Pollutants				<input type="checkbox"/>
● Dredge/Fill Permits - Federal Act Section 404				<input type="checkbox"/>
● Potable Water Supply Well				<input type="checkbox"/>
● Relevant Environmental Permits - Including Federal, State, & Local Approvals - Specify:				<input type="checkbox"/>

**9. PERMIT CONTACT(S)** (Person Familiar with the Facility/Site and this Application)

- a. *Contact Program Type:* ☒ Surface Water ☐ Storm Water ☒ Groundwater ☐ Pretreatment ☐ Residuals
- Name: John Virgie Affiliation: Earth Systems, Inc.
- Mailing Address: 1625 Highway 71
- City or Town: Belmar State: NJ Zip Code: 07719
- Telephone: (732) 739-6444 Email: jvirgie@earthsys.net

*Additional Contact (if appropriate)*

- b. *Contact Program Type:* ☐ Surface Water ☐ Storm Water ☐ Groundwater ☐ Pretreatment ☐ Residuals
- Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_
- Mailing Address: \_\_\_\_\_
- City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_
- Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

**10. LICENSED OPERATOR(S)** (If Applicable)

Name: Albert C. Roscioli N.J. License No.: NJ0002662

Organization Name: Rubicon Environmental LLC

Mailing Address: 4022 Redwood Drive

City or Town: Bethlehem State: PA Zip Code: 18020

Telephone: (610) 390-4172 Email: aroscioli@hess.com

**11. MONITORING REPORT RECIPIENT** (Not Applicable for Facilities Required to Report Electronically)

(Check if the information is the same as contained in: ☒ Section 2 above ☐ Section 3 above )

Organization Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_



**12. NJPDES PERMIT FEES INVOICE RECIPIENT**(Check if the information is the same as contained in: ☒ Section 2 above ☐ Section 3 above )

Organization Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City or Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

**13. WATER SUPPLY/DISCHARGE INFORMATION**RAW WATER SOURCES: Please check ☒ all that apply.☐ Public Water Supply: Name of the water utility \_\_\_\_\_☐ Private Wells☒ Surface Water: Name of the water body(s) North Drainage Ditch, tributary to the Arthur KillA) Is this facility/site connected to a sanitary sewer? ☐ Yes ☒ No

If yes, list name, address, and phone number of receiving wastewater treatment plant: \_\_\_\_\_

B) Does this facility discharge to a storm drainage system? ☐ Yes ☒ NoIf yes, please check ☒: ☐ Public ☐ PrivateC) Does this facility discharge to surface water? ☒ Yes ☐ NoD) Does this facility discharge to ground water? ☐ Yes ☒ No

E) For Sewage Treatment Plants:

i) Do you have combined sewers in your sewer service area? ☐ Yes ☐ Noii) Do you have any outfalls in the combined areas? ☐ Yes ☐ No**14. APPLICANT'S AGENT (Optional)**

The person listed below is authorized to act as agent/representative in all matters pertaining to this application.

Name: John Virgie, LSRP Position: Senior Client ManagerOrganization Name: Earth Systems, Inc.Mailing Address: 1625 Route 71City or Town: Belmar State: NJ Zip Code: 07719Telephone: (732) 739-6444 Email: jvirgie@earthsys.netJohn S. Virgie  
Signature of Agent4/7/20  
DateJohn Schenk  
Signature of Applicant5/19/2020  
Date

**15. PROPERTY OWNER'S CERTIFICATION (For DGW Permits Only)**

I hereby certify that \_\_\_\_\_ owns the property identified in (d.) below. The owner  
(Property Owner's Name)  
grants permission for the activity to be permitted under this application and authorizes the Department to conduct on-site inspections, if necessary.

In addition, I certify: (check "yes" or "no")

YES NO

- a. The activity will take place in an easement? ☐ YES ☐ NO
- b. Part of the entire project (e.g. pipeline, disposal area, wells, etc.) is or will be located within property owned by the State of New Jersey? ☐ YES ☐ NO
- c. Part of the entire project (e.g. pipeline, disposal area, wells, etc.) is or will be located within property owned by a municipality or county? If yes, contact the Green Acres Program at (609) 984-0500 for a determination. ☐ YES ☐ NO

d. Lot (s) \_\_\_\_\_ Block (s) \_\_\_\_\_

Signature for Owner \_\_\_\_\_

Date \_\_\_\_\_

Print or Type: Name & Position \_\_\_\_\_

**Note:** If "yes" to statements a, b, or c, the applicant must provide evidence of obtaining permission from the other property owners (include copy with this application).

**16. WATER QUALITY MANAGEMENT PLAN CONSISTENCY DETERMINATION (CD) CERTIFICATION**

*(For new or expanding projects or activities assigned a permit category of A, B, ASC, GW, or T1)*

I hereby certify that the land area intended to be served by the proposed treatment works, and identified on the map accompanying this application, is within an area eligible for sewer service in accordance with the approved areawide Water Quality Management (WQM) plan identified below. Further, I understand that, consistent with the regulations at N.J.A.C. 7:15-3.2, a permit or approval can only be issued by the Department for projects or activities that are consistent with an approved areawide WQM plan.

Water Quality Management Plan \_\_\_\_\_

Signature for Applicant/Agent \_\_\_\_\_

Date \_\_\_\_\_

Print or Type: Name & Position \_\_\_\_\_

**17. ELECTRONIC COMMUNICATIONS**

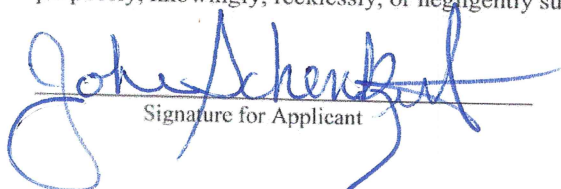
The Department's Division of Water Quality (DWQ) now processes permit applications and provides correspondence electronically. Issuance of this NJPDES permit or authorization under a general permit and all communications will be stored, retrieved, and transmitted electronically. The term "communications" means any notice, record, response or approval, or other type of information that is made available to you or received from you in connection with this permit or authorization. If you DO NOT want to receive all communications pertaining to the issuance of this permit or authorization electronically and, instead, would prefer to receive paper copies, please check the following box: ☐

If you DID NOT check the box above, the Department will send all communications related to the issuance of this permit or authorization to the email address identified in Section 2 of this application. If you would like additional email addresses to be copied on the communications, please place a checkmark below identifying the section(s) of this application where those email address(es) are located.

☐ Section 3 ☒ Section 9 ☐ Section 10 ☐ Section 11 ☐ Section 12 ☐ Section 14

**18. CERTIFICATION BY APPLICANT**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information."

  
Signature for Applicant

5/19/2020  
Date

John Schenkewitz / Senior Advisor, EHS

Print or Type: Name and Position



## INSTRUCTIONS FOR COMPLETING FORM NJPDES - 1

*This form must accompany all NJPDES permit applications and Requests for Authorizations (RFA) with the exclusion of RFAs for certain General Permit Categories which use different forms. For further information on the additional required application forms or for additional assistance in completing this application form, please contact the appropriate NJPDES permitting program or visit the websites identified below.*

<u>Program</u>	<u>Phone Number</u>	<u>Application Forms Website</u>
Surface Water	(609) 292-4860	<a href="http://www.nj.gov/dep/dwq/forms_surfacewater.htm">http://www.nj.gov/dep/dwq/forms_surfacewater.htm</a>
Stormwater	(609) 633-7021	<a href="http://www.nj.gov/dep/dwq/forms_storm.htm">http://www.nj.gov/dep/dwq/forms_storm.htm</a>
Groundwater	(609) 633-7021	<a href="http://www.nj.gov/dep/dwq/forms_ground.htm">http://www.nj.gov/dep/dwq/forms_ground.htm</a>
Residuals	(609) 984-4428	<a href="http://www.nj.gov/dep/dwq/forms_residuals.htm">http://www.nj.gov/dep/dwq/forms_residuals.htm</a>
Pretreatment (SIU)	(609) 984-4428	<a href="http://www.nj.gov/dep/dwq/forms_siu.htm">http://www.nj.gov/dep/dwq/forms_siu.htm</a>

- 1. Requested NJPDES Permit Action** - For each requested permit action under this application, identify the NJPDES permit number, the current discharge category code of the permit (if applicable), and the requested discharge category code. For a list of the discharge category codes and their descriptions, please refer to the DWQ website at <http://www.nj.gov/dep/dwq/forms.htm>. In addition, place a check mark under the requested permit action (e.g. new, renewal, etc.) and, if available, provide the expiration date of the existing permit.

For information on the causes for modification and revocation and reissuance of a permit, please refer to [N.J.A.C. 7:14A-16.4 and 16.5](#). **Important Note:** Any changes in the permittee, property owner, or operating entity, including those changes under the provisions of N.J.A.C. 7:14A-16.5(a)4, does not constitute a "modification" action for the purposes of this application. In those cases, the applicant should provide updated information through the [Administrative Update](#) or [Application for Transfer of a Permit](#) forms which should be completed and submitted to the Department.

- 2. Applicant(s)/Operating Entities** - Provide the name, as it is legally referred to, of the operating entity(ies) that is the applicant(s) in your application for the NJPDES permit. An "operating entity" is any firm, public agency, individual, or other entity which, alone or along with other operating entities, has primary management and operational decision-making authority over any part of a facility/site.

It is the duty of the operating entity(ies) to obtain a NJPDES permit. When a facility/site or activity is owned by one or more entities, but is currently operated by another entity(ies), it is the duty of the operating entity(ies) to obtain a NJPDES permit. If the facility/site named in Item 3 has an operating entity(ies) which is not an applicant submitting your application, attach an additional sheet that contains a statement to that effect and as much Item 1 information as you have about that operating entity(ies).

Provide the mailing address of the applicant(s). If the mailing address is outside the United States, provide the correct foreign mailing address. Provide the 9-digit Federal Tax Identification Number (also called Federal Identification Number) assigned to the applicant(s) by the IRS for tax reporting purposes. Provide the contact person, telephone number and e-mail address of the applicant(s). If the applicant(s) has a parent corporation(s), provide that parent corporation's name, place of incorporation, contact person and contact person's e-mail address. Provide the ownership type of the applicant by checking the appropriate box.

- 3. Property/Land Owner(s)** - Provide the legal name and mailing address of the owner(s) of the property/land upon which the discharge is controlled and/or taking place. A "Property" includes all contiguous lots and blocks, including vacant land, owned or otherwise under the control of the owner or operating entity of the regulated facility. Provide an owner contact person, telephone number and email address for the contact person. **NOTE:** For all DGW applications, the property owner where the discharge takes place must also sign item 16.
- 4. Location of Facility/Site** - Provide the name and address/location of the facility/site. Street number and name must be used (PO Box numbers will not be acceptable). Use the municipality and county where the facility/site is physically located. Do not use local or neighborhood names. Please provide the lot and block numbers. Provide the mailing address of the facility/site if it is different than the locational information already provided.
- 5. Standard Industrial Classification Code** - List, in descending order of priority, up to four 4-digit Standard Industrial Classification (SIC) codes or the North American Industrial Classification System (NAICS) which best reflect the principal products or services provided by the facility/site. The following websites are available to research these codes: [http://www.osha.gov/pls/imis/sic\\_manual.html](http://www.osha.gov/pls/imis/sic_manual.html) (SIC only) and <http://www.naics.com/search.htm> (provides crosswalk information).



6. **Project and Discharge Description (Under This Application)** - Provide a brief description of the project relating to this application (e.g., municipal sewage treatment plant, factory, shopping center, school, housing development, restaurant, etc.). For each discharge which is the subject of this application, provide the general type of waste discharged (e.g., sanitary, industrial, sludge, etc.) including non-contact cooling water. If requesting a modification to your permit, state the reason for such.
7. **Other NJPDES Permits Associated With This Facility** - List the currently held NJPDES permits and/or pending applications for this facility/site. For existing permits, list the permit number(s) and expiration date.
8. **Other Permits** - This section provides the Department with a facility's permitting status and history. Next to each permit type, list the application number and the date of the approval or denial in the appropriate column. If the application is still pending, place a check in the far right hand column.
9. **Permit Contact(s)** - Identify the contact program type, by checking the appropriate box(es), and names of up to two people that the Department can contact for permit related information. People identified in this section should be familiar with the content of the application. For each person, provide their organization name, mailing address, telephone number, and email address.
10. **Licensed Operator(s) (If Applicable)** - Provide the name, NJ License Number, organizational name, mailing address, telephone number, and email address for all licensed operator(s) of the treatment work(s).
11. **Monitoring Report Recipient** – For facilities not required to electronically report Monitoring Report Form (MRFs) that wish to receive notices/forms at a different address than in section 2 or 3 of the application, please provide the organization name, address, contact name, telephone number and email address. If the MRF recipient is the same as the entity identified in sections 2 or 3 of the application, check the appropriate box indicating which section. For information on the type of permits required to electronically report MRFs, please visit the Department's website at <http://www.nj.gov/dep/dwq/mrf.htm>.
12. **NJPDES Permit Fees Invoice Recipient** – If you wish to receive NJPDES fee invoices at a different address than in section 2 or 3 of the application, please provide the organization name, address, contact name, telephone number and email address. If the invoice recipient is the same as the entity identified in sections 2 or 3 of the application, check the appropriate box indicating which section.
13. **Water Supply/Discharge Information** – Complete this section with the pertinent information.
14. **Applicant's Agent (Optional)** - Identify the person who is authorized to act as agent/representative in all matters pertaining to this application. Provide the name, position, organizational name, mailing address, telephone number and email address of the agent. Both the agent and the authorized official of the applicant must sign the application in this section.
15. **Property Owner's Certification (For DGW Permits Only)** - Provide the appropriate information under the certification for the property where the discharge takes place.
16. **Water Quality Management Plan Consistency Determination (CD) Certification** – For new or expanding projects or activities that will be assigned a permit category of A, B, ASC, GW, or T1, provide the necessary information and certification that the land area intended to be served by the proposed treatment works is within an area eligible for sewer service in accordance with the approved Water Quality Management Plan. A list of all Water Quality Management Plans in the State is provided below. The certification must be accompanied with a map identifying the land area intended to be served by the proposed treatment works on a U.S.G.S. quadrangle map or digital format map prepared in accordance with the Department's mapping standards at N.J.A.C. 7:1D Appendix A. The certification must be made by the applicant(s) for the NJPDES permit. The applicant(s) is the operating entity(ies) for the facility/site (see item 2 instructions). Water Quality Management Planning regulation information may be obtained on the Departments website at <http://www.nj.gov/dep/wrm/index.html>.

**Water Quality Management Planning Areas**

Atlantic County (all of Atlantic Co.)	Northeast New Jersey (Passaic, Essex, Bergen, Hudson, Union, Morris, & Somerset)
Cape May County (all of Cape May Co.)	Ocean County (all of Ocean Co.)
Lower Delaware (Salem & Cumberland Co.)	Sussex County (all of Sussex Co.)
Lower Raritan/Middlesex County (Middlesex, Union & Somerset)	Tri-County (Burlington Co., Gloucester Co., & Camden Co.)
Mercer County (all of Mercer Co.)	Upper Delaware (Warren Co., Hunterdon & Morris)
Monmouth County (all of Mercer Co.)	Upper Raritan (Somerset & Hunterdon)

17. **Electronic Communications** – If you DO NOT wish to receive communications related to the issuance of this NJPDES permit or authorization under a general permit electronically from the Department's Division of Water Quality (DWQ), please check the checkbox. In addition, if you do not check the checkbox and wish for the electronic communications from DWQ related to the permit or authorization be sent to an email address(es) other than that which is identified in Section 2 of this application, please check the boxes associated with the applicable section(s) of the application where those email addresses are located.
18. **Certification by Applicant** - The certification must be made by the applicant(s) for the NJPDES permit. The applicant(s) is the operating entity(ies) for the facility/site (see item 2 instructions).

**Please complete this form in its entirety. The signed form can be scanned and emailed to DWQ\_PAS@dep.nj.gov or, alternatively, mailed to:**

Mail Code: 401-02B  
 Permit Administration Section  
 Division of Water Quality  
 P.O. Box 420  
 Trenton, New Jersey 08625-0420

**Who may sign this form?**

A Responsible Official is defined in N.J.A.C. 7:14A-4.9 as follows:

**For a corporation:**

- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- The manager of one or more manufacturing, production, or operating facilities, provided:
  - The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of recommending major capital investment, initiating and directing comprehensive measures to assure long term compliance with environmental laws and regulations, and ensuring that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; or
  - The authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures; or
- A duly authorized representative established consistent with N.J.A.C. 7:14A-4.9(b).

**For a partnership or sole proprietorship:** A general partner or the proprietor or A duly authorized representative established consistent with N.J.A.C. 7:14A-4.9(b).

**For a government agency:**

- A ranking elected official; or
- A chief executive officer of the agency; or
- A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator); or
- A duly authorized representative established consistent with N.J.A.C. 7:14A-4.9(b).

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER QUALITY**

**SUPPLEMENTAL APPLICATION FORM TO NJPDES-1 – Discharge to Surface Water (DSW) Permit  
CATEGORY B4B- (General Groundwater Petroleum Product Cleanup)  
CATEGORY BGR (General Groundwater Non-Petroleum Product Cleanup)**

Please provide a cover letter, NJPDES-1 form and this form to complete a Request for Authorization (RFA) for any new or renewal B4B or BGR NJPDES DSW Permit. Provide all applicable information. Please print or type (attach additional sheets if necessary). Please contact the Bureau of Surface Water Permitting at (609) 292-4860 with any questions on this form.

If you would like to do business electronically, please complete and submit the “Agreement To Do Business Electronically” form that is included with the NJPDES-1 form.

<b>1. FACILITY NAME:</b> Hess Corporation - Former Port Reading Refinery, AOC: 3 - No. 1 Landfarm			<b>2. NJPDES NO. :</b> (New Applicant Leave Blank) <b>NJ:</b>	
<b>3. THE PERMIT APPLICATION SHALL INCLUDE THE FOLLOWING ATTACHMENTS:</b> <b>A. FACILITY DIAGRAM</b> (Show facility and location of discharge) <b>B. TREATMENT FLOW DIAGRAM</b> (Show water flow and treatment) <b>C. USGS MAP</b> (U.S. Geological Survey Topographic Map, 7.5 minute Quadrangle Series) (Show facility and location of discharges to streams, storm sewers, and storm sewer discharges to streams as applicable)				
<b>4. Outfall Information:</b>				
OUTFALL NUMBER	LATITUDE (deg., min., sec.)	LONGITUDE (deg., min., sec.)	Conveyances (pipe, storm drain, ditch, other)	RECEIVING WATER (name and classification)
DSN001A	40 33'45.19"	74 14'25.69"	Temporary Outfall Pipe	North Drainage Ditch (tributary to Arthur Kill; SE-3(C2))
DSN002A				
DSN003A				
DSN004A				
DSN005A				
<b>5. Duration of Discharge:</b>				
OUTFALL NUMBER	START AND END DATE (Month/Year) (for temporary discharges)		FREQUENCY	
DSN001A	Start Date: 08/01/2020    End Date: 08/01/2021		Days Per Week: 5	Hours Per Day: 12
DSN002A	Start Date:                      End Date:		Days Per Week:	Hours Per Day:
DSN003A	Start Date:                      End Date:		Days Per Week:	Hours Per Day:
DSN004A	Start Date:                      End Date:		Days Per Week:	Hours Per Day:
DSN005A	Start Date:                      End Date:		Days Per Week:	Hours Per Day:
<b>6. Contaminant/Treatment Information</b>				
a) List Source(s) Of Groundwater Contamination (i.e. Leak from a #2 Fuel Oil Underground Storage Tank):  De-watering for remediation activities from RCRA permitted No.1 Landfarm				
b) Summarize Contaminants of Concern- Attach the laboratory data (results only) of at least <b>ONE REPRESENTATIVE SAMPLE OF UNTREATED GROUNDWATER</b> , including but not limited to, from a recovery well, monitoring well and from an excavation. Volatiles, Acid Compounds, Base Neutral, Pesticides and Dioxin, Metals and Cyanide, Total Phenols, Methyl-Tert-Butyl Ether (MTBE) and Tert-Butyl-Alcohol (TBA) must be analyzed. See the attached list of required parameters to be sampled. The applicant may use historical data, as long as it is representative of the proposed discharge and provided that the data was collected no more than 12 months prior to the submittal of this application. Summarize Contaminants of Concern here:  TSS, Toxicity (WET), TPH, TOC, CN, Ni, Zn, Napthalene , MTBE, Benzene, TBA, pH.				



**c) Describe the treatment system (estimate proposed flow if data is not available):**

Estimated 20-30 GPM to be used as-needed to de-water the No.1 Landfarm unit prior to, and during remediation (capping) construction activities.

OUTFALL NUMBER	NAME OF OPERATION OR PROCESS (i.e. Groundwater Remediation)	AVERAGE DAILY AND MAX. DESIGN FLOW (MGD or GPD)	Treatment Technologies (i.e. Frac. Tank, Air Stripper, GAC Filter, etc.)
DSN001A	De-watering of RCRA permitted landfarm for remediation	Avg: 21,600 GPD Max: 43,200 GPD	Settling Tank, Filter Bags, MRF (BIRM and METSORB), GAC Filter Canister
DSN002A			
DSN003A			
DSN004A			
DSN005A			

**7. EVIDENCE OF APPLICATION SUBMISSION TO THE AFFECTED SEWERAGE ENTITY(IES) AND MUNICIPALITY:** Applicable for **NEW discharges or activities or for a change in the location or method of discharge for EXISTING discharges**. Submit copies of the signed and dated notices that were sent along with this application to the affected sewerage entity(ies) and municipality via certified mail return receipts requested or by other means of verification, and copies of the dated certified mail return receipts or other means of verification of receipt.

NOTE: Prior to submitting the application to the Department, submit the following to the affected sewerage entity(ies) and municipality in accordance with N.J.A.C. 7:14A-4.3(a)13:

1. A copy of the Application.
2. A written notice (certified mail return receipt requested or by other means which allows verification of the fact and date of receipt) that the sewerage entity(ies) and municipality must submit to the Department written comments regarding or objections to the proposed discharge or activity within 30 days of receipt of said notice. The Department shall consider these comments in determining whether to issue an authorization. The Department can proceed with the authorization even if comments are not submitted.

**8. PUBLIC NOTICE:** The permittee is required to publish the following in a daily or weekly newspaper within the affected area for one day to request authorization under the General Permit pursuant to N.J.A.C. 7:14A- 6.13(d)3:

*"Notice is hereby given that pursuant to N.J.A.C. 7:14A-6.13(d)3, Hess Corporation  
[name of applicant] intends to submit a request for authorization under the General Groundwater  
Petroleum product clean-up permit [Petroleum Product Clean-up Permit, No. NJ0102709 or Non  
Petroleum Product, No. NJ0155438] to the N.J. Department of Environmental Protection. This  
authorization will allow Hess Corporation - Former Port Reading Refinery, 750 Cliff Road, Port Reading, NJ [name and address  
of facility] to discharge decontaminated groundwater from remediation projects into select surface  
waters of the State."*

**Please submit documentation that a public notice has been completed (attach signed letter or copy of public notice).**

FACILITY NAME: Hess Corporation - Former Port Reading Refinery, AOC: 3 - No. 1 Landfarm

**9. TREATMENT WORKS APPROVAL:** Prior to discharge and upon issuance of a Final permit, a General Industrial Treatment Works Approval (GI TWA) may be required for the construction of a treatment works (N.J.A.C. 7:14A-22) which will enable you to meet limits and conditions of the NJPDES permit. If you have any questions or comments regarding the TWA, please contact the General Industrial TWA Permits Section of the Bureau of Construction and Connection Permits at (609) 984-4429.

**10. RESIDUALS APPLICATION FORM R GENERATOR – INDUSTRIAL** Contact the Bureau of Pretreatment and Residuals at (609) 633-3823 with questions. For BGR applications **only**.

**11. STORM DRAINAGE SYSTEMS UNDER THE JURISDICTION OF THE NJDOT** If the applicant will make an attachment or install drainage facilities to any NJDOT storm drainage system or within the state highway system, it shall contact the appropriate NJDOT office below:

Northern Office 973-601-6625-5140, Counties: Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union and portions of Warren (North of Route 57 only)

Central Office 732-625-4330, Counties: Hunterdon, Mercer, Middlesex, Monmouth, Ocean, Somerset and portions of Warren (Routes 22, 122, 173, 78 and including south of Route 57 only)

Southern Office 856-486-6688, Counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem

**12. CERTIFICATION BY THE APPLICANT:**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly or negligently submitting false information."

NAME (Type or Print)

John Schenkewitz

TITLE (Type or Print)

Senior Advisor, EHS

SIGNATURE

DATE

5/19/2020

PHONE NUMBER

(609) 406-3969

EMAIL ADDRESS

jschenkewitz@hess.com

For Hess Corporation

NAME OF APPLICANT/OPERATING ENTITY (Type or Print)

**SUBMIT THIS FORM ALONG WITH A COVER LETTER, THE  
NJPDES-1 FORM AND NECESSARY ATTACHMENTS TO:**

Mail Code 401-02B  
Permit Administration Section  
Division of Water Quality  
PO Box 420  
Trenton, New Jersey 08625-0420



# ORGANIC TOXIC POLLUTANTS IN EACH OF FOUR FRACTIONS IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GC/MS)

## Volatiles

Acrolein  
Acrylonitrile  
Benzene  
Bromoform  
Carbon Tetrachloride  
Chlorobenzene  
Chlorodibromomethane  
(Dibromochloromethane)  
Chloroethane  
2-Chloroethylvinyl Ether  
Chloroform  
Dichlorobromomethane  
1,1-Dichloroethane  
1,2-Dichloroethane  
1,1-Dichloroethylene  
1,2-Dichloropropane  
1,3-Dichloropropylene  
Ethylbenzene  
Methyl Bromide  
Methyl Chloride  
Methylene Chloride  
1,1,2,2-Tetrachloroethane  
Tetrachloroethylene  
Toluene  
1,2-trans-Dichloroethylene  
1,1,1-Trichloroethane  
1,1,2-Trichloroethane  
Trichloroethylene  
Vinyl Chloride

## Acid Compounds

2-Chlorophenol  
2,4-Dichlorophenol  
2,4-Dimethylphenol  
4,6-Dinitro-O-Cresol  
2,4-Dinitrophenol  
2-Nitrophenol  
4-Nitrophenol  
P-Chloro-M-Cresol  
Pentachlorophenol  
Phenol  
2,4,5-Trichlorophenol  
2,4,6-Trichlorophenol

## Base/Neutral

Acenaphthene  
Acenaphthylene  
Anthracene  
Benzidine  
Benzo(a)Anthracene  
Benzo(a)Pyrene  
3,4-Benzofluoranthene  
Benzo(ghi)Perylene  
Benzo(k)Fluoranthene  
Bis (2-Chloroethoxy) Methane  
Bis (2-Chloroethyl) Ether  
Bis (2-Chloroisopropyl) Ether  
Bis (2-Ethylhexyl) Phthalate  
4-Bromophenyl Phenyl Ether  
Butyl Benzyl Phthalate  
Chloride  
2-Chloronaphthalene  
4-Chlorophenyl Phenyl Ether  
Chrysene  
Dibenzo (a,h) Anthracene  
1,2-Dichlorobenzene  
1,3-Dichlorobenzene  
1,4-Dichlorobenzene  
3,3'-Dichlorobenzidine  
Diethyl Phthalate  
Dimethyl Phthalate  
Di-N-Butyl Phthalate  
2,4-Dinitrotoluene  
2,6-Dinitrotoluene  
Di-N-Octyl Phthalate  
1,2-Diphenylhydrazine(as  
Azobenzene)  
Fluoranthene  
Fluorene  
Hexachlorobenzene  
Hexachlorobutadiene  
Hexachlorocyclopentadiene  
Hexachloroethane  
Indeno (1,2,3-cd) Pyrene  
Isophorone  
Naphthalene

Nitrobenzene  
N-Nitrosodiethylamine  
N-Nitrosodimethylamine  
N-Nitrosodi-N butylamine  
N-Nitrosodi-N-Propylamine  
(Di-N-Propylnitrosamine)  
N-Nitrosodiphenylamine  
N-Nitrosopyrrolidine  
Pentachlorobenzene  
Phenanthrene  
Pyrene  
1,2,4,5-Tetrachlorobenzene  
1,2,4-Trichlorobenzene

## Pesticides and Dioxin

Aldrin  
Alpha-BHC  
Beta-BHC  
Gamma-BHC (Lindane)  
Delta-BHC  
Chlordane  
Chlorpyrifos  
4,4'-DDT  
4,4'-DDE  
4,4'-DDD  
Demeton  
Dieldrin  
Alpha-Endosulfan  
Beta-Endosulfan  
Endosulfan Sulfate  
Endosulfans, Total (alpha and  
beta)  
Endrin  
Endrin Aldehyde  
Guthion  
Heptachlor  
Heptachlor Epoxide  
Malathion  
Methoxychlor  
Mirex  
Parathion  
PCB-1242, PCB-1254  
PCB-1221, PCB-1232  
PCB-1248, PCB-1260  
PCB-1016

Toxaphene  
Polychlorinated  
biphenyls (PCBs)  
2,3,7,8  
Tetrachlorodibenzo-p-  
dioxin (TCDD) <sup>1</sup>

1 It is acceptable to use the screening procedure for 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin (TCDD) using Method 625. Please note that Method 625 is approved for TCDD screening only and is not to be used for quantitation. Should TCDD be detected using Method 625, then Method 613, or another approved test procedure, must be used to conclusively determine the pollutant's presence and concentration level.

**OTHER TOXIC POLLUTANTS (*METALS AND CYANIDE*) AND TOTAL PHENOLS**

Antimony, Total  
Arsenic, Total  
Beryllium, Total  
Cadmium, Total  
Chromium, Total  
Copper, Total  
Lead, Total  
Mercury, Total  
Nickel, Total  
Selenium, Total  
Silver, Total  
Thallium, Total  
Zinc, Total  
Cyanide, Total  
Phenols, Total

**CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS REQUIRED TO BE TESTED *IF EXPECTED TO BE PRESENT***

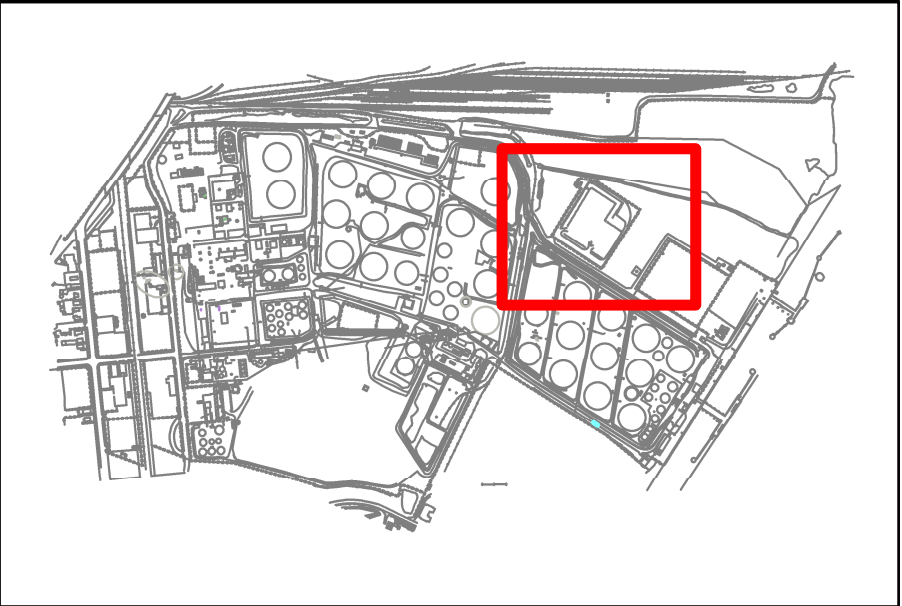
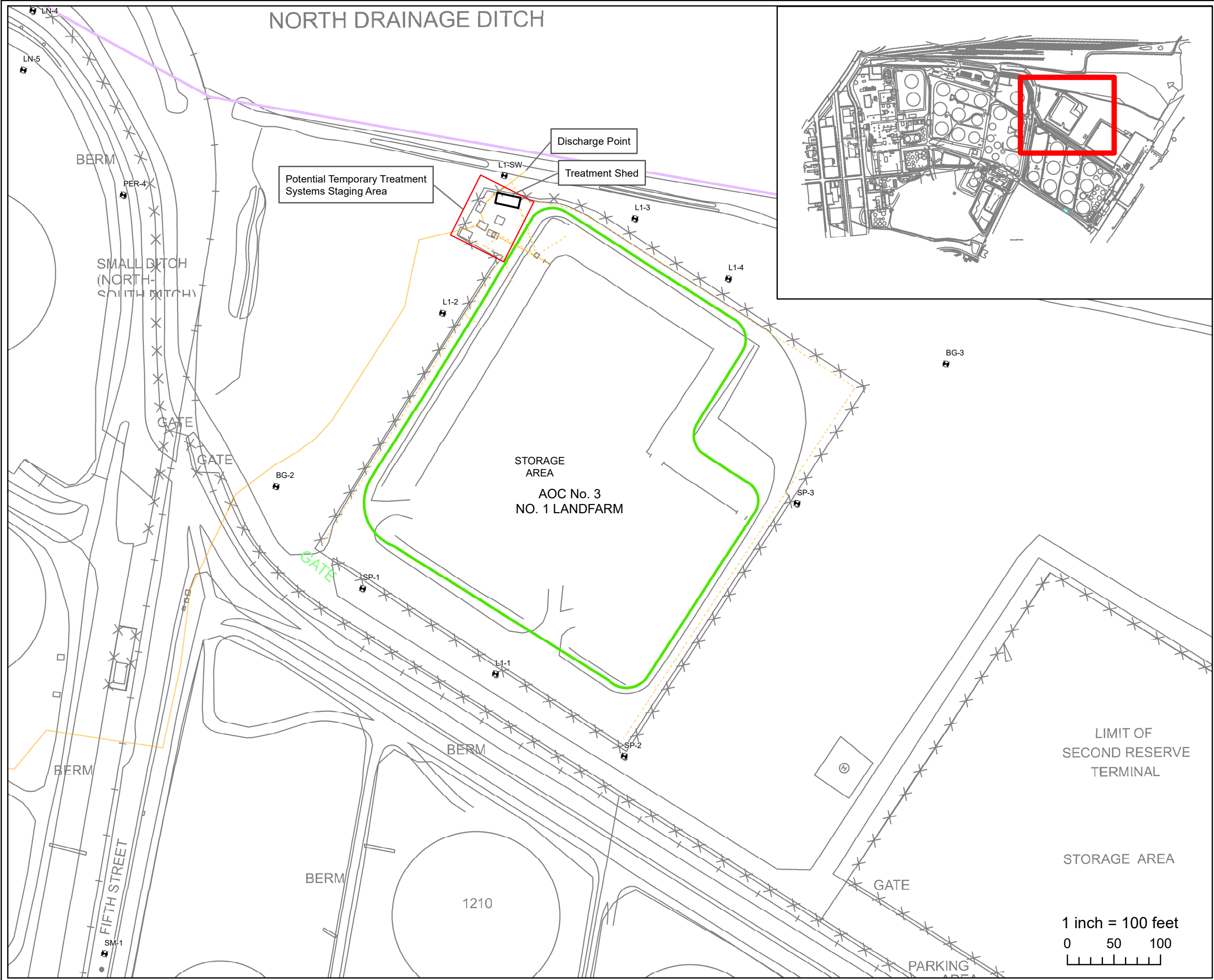
Fecal Coliform  
Radioactivity  
Iron, Total

**ADDITIONAL PARAMETERS REQUIRED AS PART OF THE B4B AND BGR APPLICATION**

Methyl-*Tert*-Butyl Ether (MTBE)  
*Tert*-Butyl-Alcohol (TBA)



## **Exhibit A**



LEGEND

- Monitoring Well
- Underground Utilities
- Colonial Pipeline
- AOC 3 - No. 1 Landfarm



NOTE:  
- MONITORING WELLS GAUGED ON OCTOBER 8TH, 2019

EXHIBIT: A  
FACILITY DIAGRAM  
AOC-3 - NO. 1 LANDFARM

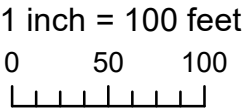
HESS CORPORATION  
FORMER PORT READING COMPLEX  
750 CLIFF ROAD  
PORT READING, NEW JERSEY

Project #:	1114J07	Drawn:	01/14/2020
SRP PI#:	006148	Drawn By:	RC



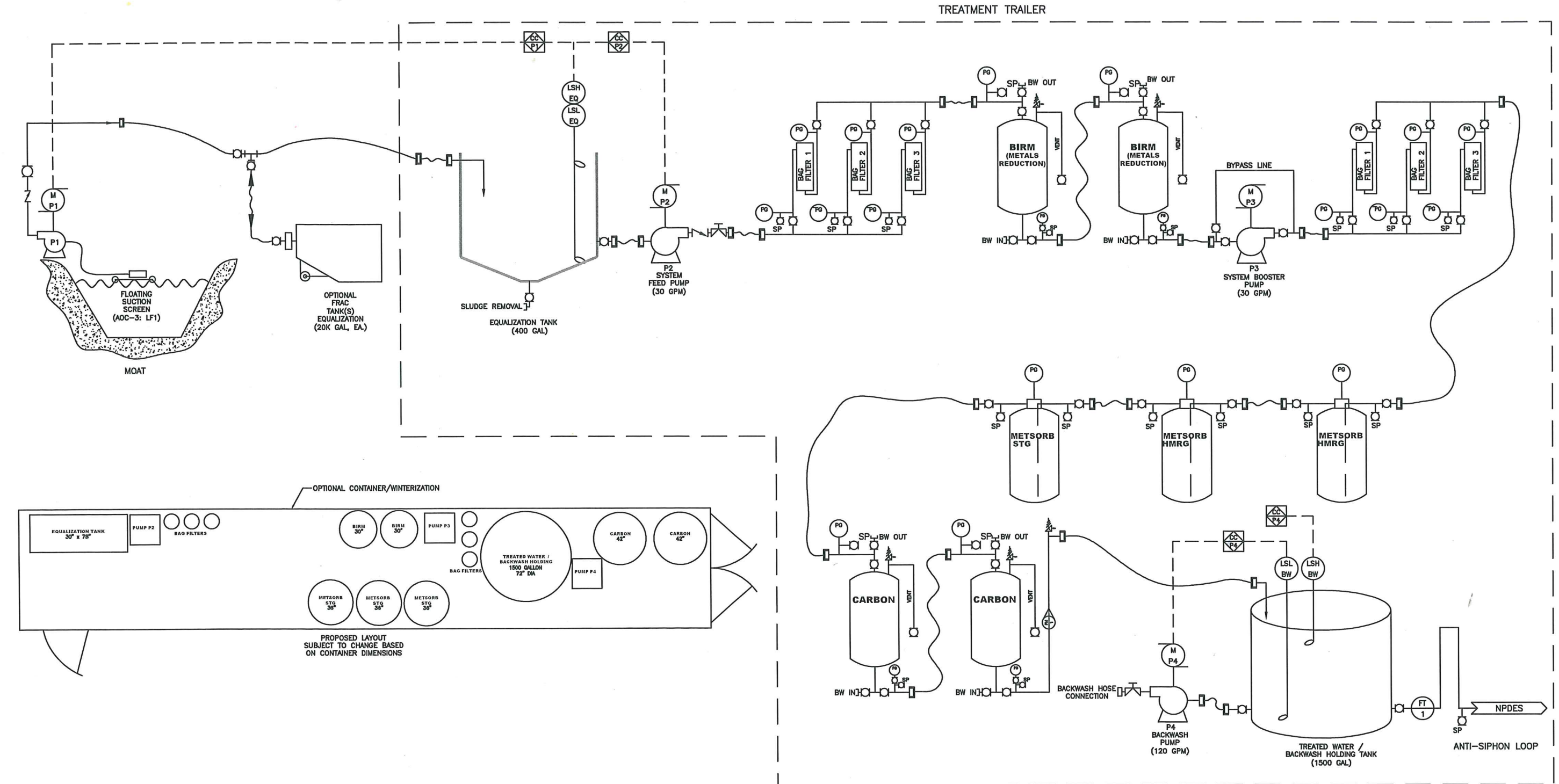
1625 Highway 71, Belmar, NJ 07719  
T. 732.739.6444 | F. 732.739.0451

This map was developed using New Jersey Department of Environmental Protection Geographic Information System Digital Data, but this secondary product has not been verified by NJDEP and is not state Authorized. Source: NAD 1983 (2011) New Jersey State Plane FIPS 2900 US FT.



## **Exhibit B**

y:\000\civil\earth systems\part reading\production drawings\6\_permit application\figure 1 treatment system flow diagram.dwg Last Saved By: Scorer 3/4/2020 1:54 PM Plotted By: Shelly Carter 3/4/2020 1:55 PM Scale: 1/2"



	FLOW CONTROL VALVE		CAM LOCK/HOSE CONNECTIONS		FLOW METER
	LEVEL SWITCH: H=HIGH; L= LOW		BUTTERFLY VALVE		VACUUM BREAKER/AIR RELEASE
	MOTOR CONTROL		CHECK VALVE		PRESSURE GAUGE
	FLOW TOTALIZER		BALL VALVE		SAMPLE PORT

NOTES:  
1) 1-1/2" DIA SCH 80 PVC PIPE AND FITTINGS.  
2) 1-1/2" DIA PVC FLEXIBLE HOSE AND FITTINGS.  
3) DESIGN FLOW: 30 GPM  
4) BACKWASH TO LANDFARM.

REV #	DATE	DESCRIPTION	APPD

REFERENCE:

ISSUE DATE:

KEY ENVIRONMENTAL, INC.  
200 THIRD AVENUE  
CARNEGIE, PA 15106

PLAN PREPARED BY:  
VALISEE M. VEERA PROFESSIONAL ENGINEER  
N.J. LICENSE NUMBER: 24GE05005500

SIGNATURE: *[Signature]* DATE: 03/23/2020

STATE OF NEW JERSEY  
CERTIFICATE OF AUTHORIZATION  
TO OFFER ENGINEERING SERVICES  
24GE05005500

EARTH SYSTEMS, INC.

DRWN: SCC DATE: 02/27/20  
CHKD: RM DATE: 02/27/20  
APPD: VMV DATE: 02/27/20  
SCALE: AS SHOWN

**KEY** ENVIRONMENTAL  
INCORPORATED

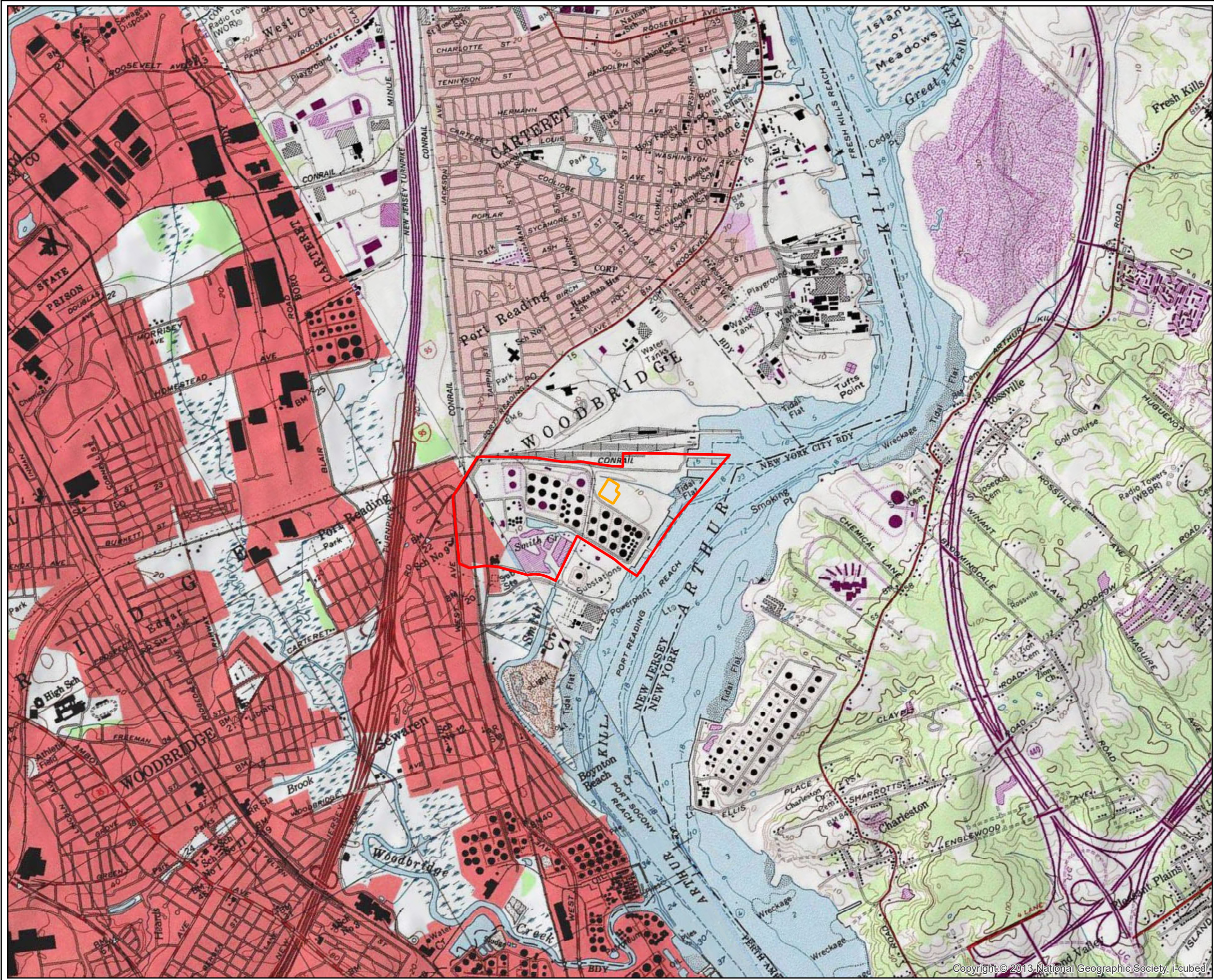
HESS CORPORATION-FORMER PORT READING REFINING FACILITY  
PORT READING, MIDDLESEX COUNTY, NEW JERSEY

TREATMENT SYSTEM FLOW DIAGRAM

PROJECT NO: 18-828  
FIGURE 1

## **Exhibit C**





**LEGEND**

- AOC 3 - No. 1 Landfarm
- Site



0 2,000 4,000  
1 inch = 2,000 feet

**EXHIBIT: C**  
**U.S.G.S. TOPOGRAPHIC MAP**

**HESS CORPORATION**  
**FORMER PORT READING COMPLEX**  
**750 CLIFF ROAD**  
**PORT READING, NEW JERSEY**

Project #:	1114J07	Drawn:	01/14/2020
SRP PI#:	006148	Drawn By:	RC



Environmental Engineering  
1625 Highway 71, Belmar, NJ 07719  
T. 732.739.6444 | F. 732.739.0451

This map was developed using New Jersey Department of Environmental Protection Geographic Information System Digital Data, but this secondary product has not been verified by NJDEP and is not state Authorized. Source: NAD 1983 (2011) New Jersey State Plane FIPS 2900 US FT.



## **Exhibit D**

Exhibit D: Laboratory Analytical Results  
2018 Through 2020 Leachate Results Table  
Hess Corporation - Former Port Reading Refinery, AOC 3: No.1 Landfarm  
750 Cliff Road, Port Reading, New Jersey

Sample ID:		L1-LEACHATE	LEACHATE	L1-LEACHATE	L1-LEACHATE	L1-LEACHATE	INFLUENT	L1-LEACHATE
Lab Sample ID:		JC65089-1	JC68430-1	JC75667-1	JC90256-1	JC97090-1	JD823-1	JD1977-1
Date Sampled:		4/27/2018	6/20/2018	10/10/2018	6/20/2019	10/18/2019	12/23/2019	1/20/2020
Matrix:		Water	Water	Water	Water	Water	Influent	Water
MS Volatiles (EPA 624.[1])								
Acrolein	ug/l	-	ND (6.2)	-	-	ND (3.7)	ND (3.7)	-
Acrylonitrile	ug/l	-	ND (1.9)	-	-	ND (0.72)	ND (0.72)	-
Bis(chloromethyl)ether	ug/l	-	IND	-	-	IND	IND	-
Benzene	ug/l	-	ND (0.23)	-	-	ND (0.34)	ND (0.34)	ND (0.34)
Bromodichloromethane	ug/l	-	ND (0.19)	-	-	ND (0.35)	ND (0.35)	ND (0.35)
Bromoform	ug/l	-	ND (0.44) <sup>a</sup>	-	-	ND (0.60)	ND (0.60)	ND (0.60)
Bromomethane	ug/l	-	ND (0.74)	-	-	ND (0.87) <sup>c</sup>	ND (0.87) <sup>b</sup>	ND (0.87)
Carbon tetrachloride	ug/l	-	ND (0.31)	-	-	ND (0.55)	ND (0.55)	ND (0.55)
Chlorobenzene	ug/l	-	ND (0.23)	-	-	ND (0.33)	ND (0.33)	ND (0.33)
Chloroethane	ug/l	-	ND (0.63)	-	-	ND (0.54)	ND (0.54)	ND (0.54)
2-Chloroethyl vinyl ether	ug/l	-	ND (1.5)	-	-	ND (2.5)	ND (2.5)	ND (2.5)
Chloroform	ug/l	-	ND (0.20)	-	-	ND (0.50)	ND (0.50)	ND (0.50)
Chloromethane	ug/l	-	ND (0.29)	-	-	ND (0.78)	ND (0.78)	ND (0.78)
Dibromochloromethane	ug/l	-	ND (0.30) <sup>a</sup>	-	-	ND (0.43)	ND (0.43)	ND (0.43)
1,2-Dibromoethane	ug/l	-	ND (0.27)	-	-	ND (0.28)	ND (0.28)	-
1,2-Dichlorobenzene	ug/l	-	ND (0.21)	-	-	ND (0.30)	ND (0.30)	ND (0.30)
1,3-Dichlorobenzene	ug/l	-	ND (0.24)	-	-	ND (0.66)	ND (0.66)	ND (0.66)
1,4-Dichlorobenzene	ug/l	-	ND (0.24)	-	-	ND (0.63)	ND (0.63)	ND (0.63)
Dichlorodifluoromethane	ug/l	-	ND (0.67) <sup>a</sup>	-	-	ND (1.4)	ND (1.4)	ND (1.4)
1,1-Dichloroethane	ug/l	-	ND (0.32)	-	-	ND (0.42)	ND (0.42)	ND (0.42)
1,2-Dichloroethane	ug/l	-	ND (0.32)	-	-	ND (0.39)	ND (0.39)	ND (0.39)
1,1-Dichloroethene	ug/l	-	ND (0.57)	-	-	ND (0.59)	ND (0.59)	ND (0.59)
cis-1,2-Dichloroethene	ug/l	-	ND (0.54)	-	-	ND (0.51)	ND (0.51)	ND (0.51)
trans-1,2-Dichloroethene	ug/l	-	ND (0.40)	-	-	ND (0.46)	ND (0.46)	ND (0.46)
1,2-Dichloropropane	ug/l	-	ND (0.36)	-	-	ND (0.42)	ND (0.42)	ND (0.42)
cis-1,3-Dichloropropene	ug/l	-	ND (0.36)	-	-	ND (0.47)	ND (0.47)	ND (0.47)
trans-1,3-Dichloropropene	ug/l	-	ND (0.59)	-	-	ND (0.56)	ND (0.56)	ND (0.56)
1,4-Dioxane	ug/l	-	ND (27)	-	-	ND (69)	ND (69)	-
Ethylbenzene	ug/l	-	ND (0.21)	-	-	ND (0.30)	ND (0.30)	ND (0.30)
Ethylenimine	ug/l	-	IND	-	-	IND	IND	-
Methyl Tert Butyl Ether	ug/l	-	-	-	-	-	-	ND (0.87)
Methylene chloride	ug/l	-	ND (0.55)	-	-	ND (0.41)	ND (0.41)	ND (0.41)
Tertiary Butyl Alcohol	ug/l	-	-	-	-	-	-	ND (5.8)
1,1,2,2-Tetrachloroethane	ug/l	-	ND (0.24)	-	-	ND (0.32)	ND (0.32)	ND (0.32)
Tetrachloroethene	ug/l	-	ND (0.82)	-	-	ND (0.90)	ND (0.90)	ND (0.90)
Toluene	ug/l	-	ND (0.24)	-	-	ND (0.36)	ND (0.36)	ND (0.36)
1,1,1-Trichloroethane	ug/l	-	ND (0.36)	-	-	ND (0.54)	ND (0.54)	ND (0.54)
1,1,2-Trichloroethane	ug/l	-	ND (0.35)	-	-	ND (0.41)	ND (0.41)	ND (0.41)
Trichloroethene	ug/l	-	ND (0.24)	-	-	ND (0.43)	ND (0.43)	ND (0.43)
Trichlorofluoromethane	ug/l	-	ND (0.89)	-	-	ND (0.84)	ND (0.84)	ND (0.84)
Vinyl chloride	ug/l	-	ND (0.29)	-	-	ND (0.79)	ND (0.79)	ND (0.79)
Xylenes (total)	ug/l	-	ND (0.20)	-	-	ND (0.35)	ND (0.35)	ND (0.35)
MS Volatiles (SW846 8260C)								
Benzene	ug/l	ND (0.17)	-	ND (0.43)	ND (0.43)	-	-	-
2-Butanone (MEK)	ug/l	ND (4.8)	-	ND (6.9)	ND (6.9)	-	-	-
Carbon disulfide	ug/l	ND (0.50)	-	ND (0.95)	ND (0.95)	-	-	-
Chlorobenzene	ug/l	ND (0.24)	-	ND (0.56)	ND (0.56)	-	-	-
Chloroform	ug/l	ND (0.29)	-	ND (0.50)	ND (0.50)	-	-	-
1,2-Dibromoethane	ug/l	ND (0.21)	-	ND (0.48)	ND (0.48)	-	-	-
1,2-Dichloroethane	ug/l	ND (0.20)	-	ND (0.60)	ND (0.60)	-	-	-
1,4-Dioxane	ug/l	ND (52)	-	ND (69)	ND (69)	-	-	-
Ethylbenzene	ug/l	ND (0.22)	-	ND (0.60)	ND (0.60)	-	-	-
Methyl Tert Butyl Ether	ug/l	0.44 J	-	ND (0.51)	ND (0.51)	-	-	-
Styrene	ug/l	ND (0.24)	-	ND (0.70)	ND (0.70)	-	-	-
Tert Butyl Alcohol	ug/l	ND (7.0)	-	ND (5.8)	ND (5.8)	-	-	-
Toluene	ug/l	ND (0.25)	-	ND (0.53)	ND (0.53)	-	-	-
Vinyl chloride	ug/l	ND (0.62)	-	ND (0.79)	ND (0.79)	-	-	-
Xylene (total)	ug/l	ND (0.22)	-	ND (0.59)	ND (0.59)	-	-	-
MS Volatile TIC								
Total TIC, Volatile	ug/l	-	-	-	-	-	-	0
MS Semi-volatiles (EPA 625.[1])								
2-Chlorophenol	ug/l	-	ND (0.78)	-	-	ND (0.82)	ND (0.78)	ND (0.82)
4-Chloro-3-methyl phenol	ug/l	-	ND (0.85)	-	-	ND (0.89) <sup>b</sup>	ND (0.85)	ND (0.89)
2,4-Dichlorophenol	ug/l	-	ND (1.2)	-	-	ND (1.3)	ND (1.2)	ND (1.3)
2,4-Dimethylphenol	ug/l	-	ND (2.3)	-	-	ND (2.4)	ND (2.3)	ND (2.4)
2,4-Dinitrophenol	ug/l	-	ND (1.5)	-	-	ND (1.6) <sup>b</sup>	ND (1.5)	ND (1.6) <sup>b</sup>
4,6-Dinitro-o-cresol	ug/l	-	ND (1.2)	-	-	ND (1.3) <sup>b</sup>	ND (1.2)	ND (1.3) <sup>b</sup>
2-Nitrophenol	ug/l	-	ND (0.91)	-	-	ND (0.96) <sup>b</sup>	ND (0.91)	ND (0.96) <sup>b</sup>
4-Nitrophenol	ug/l	-	ND (1.1)	-	-	ND (1.2) <sup>b</sup>	ND (1.1)	ND (1.2) <sup>b</sup>
Pentachlorophenol	ug/l	-	ND (1.3)	-	-	ND (1.4) <sup>b</sup>	ND (1.3)	ND (1.4) <sup>f</sup>
Phenol	ug/l	-	ND (0.37)	-	-	ND (0.39) <sup>g</sup>	ND (0.37)	ND (0.39)
2,4,5-Trichlorophenol	ug/l	-	-	-	-	-	-	ND (1.3) <sup>f</sup>
2,4,6-Trichlorophenol	ug/l	-	ND (0.88)	-	-	ND (0.92)	ND (0.88)	ND (0.92)
Acenaphthene	ug/l	-	ND (0.18)	-	-	ND (0.19)	ND (0.18)	ND (0.19)
Acenaphthylene	ug/l	-	ND (0.13)	-	-	ND (0.14)	ND (0.13)	ND (0.14)
Anthracene	ug/l	-	ND (0.20)	-	-	ND (0.21)	ND (0.20)	ND (0.21)
Benzenethiol	ug/l	ND (20)	-	ND (19)	ND (20)	-	-	-
Benzidine	ug/l	-	ND (0.86) <sup>d</sup>	-	-	ND (0.90)	ND (0.86)	ND (0.90) <sup>h</sup>
Benzo(a)anthracene	ug/l	-	ND (0.19)	-	-	ND (0.20)	ND (0.19)	ND (0.20)
Benzo(a)pyrene	ug/l	-	ND (0.20)	-	-	ND (0.21)	ND (0.20)	ND (0.21) <sup>f</sup>



Exhibit D: Laboratory Analytical Results  
2018 Through 2020 Leachate Results Table  
Hess Corporation - Former Port Reading Refinery, AOC 3: No.1 Landfarm  
750 Cliff Road, Port Reading, New Jersey

Sample ID:		L1-LEACHATE	LEACHATE	L1-LEACHATE	L1-LEACHATE	L1-LEACHATE	INFLUENT	L1-LEACHATE
Lab Sample ID:		JC65089-1	JC68430-1	JC75667-1	JC90256-1	JC97090-1	JD823-1	JD1977-1
Date Sampled:		4/27/2018	6/20/2018	10/10/2018	6/20/2019	10/18/2019	12/23/2019	1/20/2020
Matrix:		Water	Water	Water	Water	Water	Influent	Water
Benzo(b)fluoranthene	ug/l	-	ND (0.20)	-	-	ND (0.21)	ND (0.20)	ND (0.21) <sup>f</sup>
Benzo(g,h,i)perylene	ug/l	-	ND (0.32)	-	-	ND (0.34)	ND (0.32)	ND (0.34) <sup>f</sup>
Benzo(k)fluoranthene	ug/l	-	ND (0.20)	-	-	ND (0.21)	ND (0.20)	ND (0.21) <sup>f</sup>
4-Bromophenyl phenyl ether	ug/l	-	ND (0.38)	-	-	ND (0.40)	ND (0.38)	ND (0.40)
Butyl benzyl phthalate	ug/l	-	ND (0.44)	-	-	ND (0.46)	ND (0.44)	ND (0.46)
2-Chloronaphthalene	ug/l	-	ND (0.22)	-	-	ND (0.24)	ND (0.22)	ND (0.24)
4-Chloroaniline	ug/l	-	ND (0.32)	-	-	ND (0.34)	ND (0.32)	ND (0.34)
Chrysene	ug/l	-	ND (0.17)	-	-	ND (0.18)	ND (0.17)	ND (0.18) <sup>f</sup>
bis(2-Chloroethoxy)methane	ug/l	-	ND (0.26)	-	-	ND (0.28)	ND (0.26)	ND (0.28)
bis(2-Chloroethyl)ether	ug/l	-	ND (0.24)	-	-	ND (0.25)	ND (0.24)	ND (0.25)
2,2'-Oxybis(1-chloropropane)	ug/l	-	ND (0.38)	-	-	ND (0.40)	ND (0.38)	ND (0.40)
4-Chlorophenyl phenyl ether	ug/l	-	ND (0.35)	-	-	ND (0.37) <sup>b</sup>	ND (0.35)	ND (0.37)
1,2-Dichlorobenzene	ug/l	-	ND (0.16)	-	-	ND (0.17)	ND (0.16)	ND (0.17)
1,2-Diphenylhydrazine	ug/l	-	ND (0.18)	-	-	ND (0.19)	ND (0.18)	ND (0.19)
1,3-Dichlorobenzene	ug/l	-	ND (0.18)	-	-	ND (0.19)	ND (0.18)	ND (0.19)
1,4-Dichlorobenzene	ug/l	-	ND (0.16)	-	-	ND (0.17)	ND (0.16)	ND (0.17)
2,4-Dinitrotoluene	ug/l	-	ND (0.53)	-	-	ND (0.55) <sup>b</sup>	ND (0.53)	ND (0.55) <sup>b</sup>
2,6-Dinitrotoluene	ug/l	-	ND (0.45)	-	-	ND (0.48)	ND (0.45)	ND (0.48) <sup>b</sup>
3,3'-Dichlorobenzidine	ug/l	-	ND (0.48)	-	-	ND (0.51)	ND (0.48)	ND (0.51)
Dibenzo(a,h)anthracene	ug/l	-	ND (0.32)	-	-	ND (0.33)	ND (0.32)	ND (0.33) <sup>f</sup>
Di-n-butyl phthalate	ug/l	-	ND (0.47)	-	-	ND (0.50)	ND (0.47)	ND (0.50)
Di-n-octyl phthalate	ug/l	-	ND (0.22)	-	-	ND (0.23)	ND (0.22)	ND (0.23)
Diethyl phthalate	ug/l	-	ND (0.25)	-	-	ND (0.26)	ND (0.25)	ND (0.26)
Dimethyl phthalate	ug/l	-	ND (0.21)	-	-	ND (0.22)	ND (0.21)	ND (0.22)
bis(2-Ethylhexyl)phthalate	ug/l	-	ND (1.6)	-	-	ND (1.7)	ND (1.6) <sup>b</sup>	ND (1.7)
Fluoranthene	ug/l	-	ND (0.16)	-	-	ND (0.17) <sup>b</sup>	ND (0.16)	ND (0.17) <sup>f</sup>
Fluorene	ug/l	-	ND (0.16)	-	-	ND (0.17)	ND (0.16)	ND (0.17)
Hexachlorobenzene	ug/l	-	ND (0.31)	-	-	ND (0.33)	ND (0.31)	ND (0.33)
Hexachlorobutadiene	ug/l	-	ND (0.47)	-	-	ND (0.49) <sup>b</sup>	ND (0.47)	ND (0.49)
Hexachlorocyclopentadiene	ug/l	-	ND (2.6) <sup>b</sup>	-	-	ND (2.8)	ND (2.6)	ND (2.8) <sup>b</sup>
Hexachloroethane	ug/l	-	ND (0.37)	-	-	ND (0.39)	ND (0.37)	ND (0.39)
Indeno(1,2,3-cd)pyrene	ug/l	-	ND (0.32)	-	-	ND (0.33)	ND (0.32)	ND (0.33) <sup>f</sup>
Isophorone	ug/l	-	ND (0.26)	-	-	ND (0.28)	ND (0.26)	ND (0.28)
Naphthalene	ug/l	-	ND (0.22)	-	-	ND (0.23)	ND (0.22)	ND (0.23)
Nitrobenzene	ug/l	-	ND (0.61)	-	-	ND (0.64)	ND (0.61)	ND (0.64)
n-Nitrosodimethylamine	ug/l	-	ND (0.78)	-	-	ND (0.82)	ND (0.78)	ND (0.82)
N-Nitroso-di-n-propylamine	ug/l	-	ND (0.46) <sup>e</sup>	-	-	ND (0.48)	ND (0.46)	ND (0.48)
N-Nitrosodi-n-butylamine	ug/l	-	-	-	-	-	-	ND (0.60)
N-Nitrosodiethylamine	ug/l	-	-	-	-	-	-	ND (0.24)
N-Nitrosodiphenylamine	ug/l	-	ND (0.21)	-	-	ND (0.22)	ND (0.21)	ND (0.22) <sup>f</sup>
N-Nitrosopyrrolidine	ug/l	-	-	-	-	-	-	ND (0.73)
Pentachlorobenzene	ug/l	-	-	-	-	-	-	ND (0.24)
Phenanthrene	ug/l	-	ND (0.17)	-	-	ND (0.18)	ND (0.17)	ND (0.18)
Pyrene	ug/l	-	ND (0.21)	-	-	ND (0.22)	ND (0.21)	ND (0.22) <sup>f</sup>
1,2,4,5-Tetrachlorobenzene	ug/l	-	-	-	-	-	-	ND (0.37)
1,2,4-Trichlorobenzene	ug/l	-	ND (0.24)	-	-	ND (0.25)	ND (0.24)	ND (0.25)
2,3,7,8-TCDD	ug/l	-	ND (4.8)	-	-	ND (5.0)	ND (4.8)	ND (5.0)
MS Semi-volatiles (SW846 8270D)								
Benzenethiol	ug/l	ND (20)	-	ND (19)	ND (20)	-	-	-
2,4-Dimethylphenol	ug/l	ND (2.4)	-	ND (2.3)	ND (2.4)	-	-	-
2,4-Dinitrophenol	ug/l	ND (1.5)	-	ND (1.5)	ND (1.6) <sup>b</sup>	-	-	-
2-Methylphenol	ug/l	ND (0.88)	-	ND (0.85)	ND (0.89)	-	-	-
3&4-Methylphenol	ug/l	ND (0.87)	-	ND (0.84)	ND (0.88)	-	-	-
4-Nitrophenol	ug/l	ND (1.1)	-	ND (1.1)	ND (1.2)	-	-	-
Phenol	ug/l	ND (0.39)	-	ND (0.37)	ND (0.39)	-	-	-
Anthracene	ug/l	ND (0.21)	-	ND (0.20)	ND (0.21)	-	-	-
Benzo(a)anthracene	ug/l	ND (0.20)	-	ND (0.19)	ND (0.20)	-	-	-
Benzo(a)pyrene	ug/l	ND (0.21)	-	ND (0.20)	ND (0.21)	-	-	-
Benzo(b)fluoranthene	ug/l	ND (0.20)	-	ND (0.20)	ND (0.21)	-	-	-
Benzo(k)fluoranthene	ug/l	ND (0.20)	-	ND (0.20)	ND (0.21)	-	-	-
Butyl benzyl phthalate	ug/l	ND (0.45)	-	ND (0.44) <sup>i</sup>	ND (0.46)	-	-	-
Chrysene	ug/l	ND (0.17)	-	ND (0.17)	ND (0.18)	-	-	-
1,2-Dichlorobenzene	ug/l	ND (0.17)	-	ND (0.16)	ND (0.17)	-	-	-
1,3-Dichlorobenzene	ug/l	ND (0.19)	-	ND (0.18)	ND (0.19)	-	-	-
1,4-Dichlorobenzene	ug/l	ND (0.17)	-	ND (0.16)	ND (0.17)	-	-	-
7,12-Dimethylbenz(a)anthracene	ug/l	ND (0.79)	-	ND (0.76)	ND (0.80)	-	-	-
Dibenz(a,h)acridine	ug/l	ND (0.54)	-	ND (0.52)	ND (0.55) <sup>i</sup>	-	-	-
Dibenzo(a,h)anthracene	ug/l	ND (0.33)	-	ND (0.32)	ND (0.33)	-	-	-
Di-n-butyl phthalate	ug/l	4.3	-	ND (0.47)	ND (0.50)	-	-	-
Di-n-octyl phthalate	ug/l	ND (0.23)	-	ND (0.22) <sup>i</sup>	ND (0.23)	-	-	-
Diethyl phthalate	ug/l	ND (0.26)	-	ND (0.25)	ND (0.26)	-	-	-
Dimethyl phthalate	ug/l	ND (0.22)	-	ND (0.21)	ND (0.22)	-	-	-
bis(2-Ethylhexyl)phthalate	ug/l	ND (1.6)	-	ND (1.6) <sup>i</sup>	ND (1.7)	-	-	-
Fluoranthene	ug/l	ND (0.17)	-	ND (0.16)	ND (0.17)	-	-	-
Indene	ug/l	ND (0.30)	-	ND (0.28)	ND (0.30)	-	-	-
1-Methylnaphthalene	ug/l	ND (0.26)	-	ND (0.25)	ND (0.26)	-	-	-
6-Methyl Chrysene	ug/l	ND (5.0)	-	ND (4.8)	ND (5.0)	-	-	-
Naphthalene	ug/l	ND (0.23)	-	ND (0.22)	ND (0.23)	-	-	-
Phenanthrene	ug/l	ND (0.17)	-	ND (0.17)	ND (0.18)	-	-	-
Pyrene	ug/l	ND (0.22)	-	ND (0.21)	ND (0.22)	-	-	-
Pyridine	ug/l	ND (0.38)	-	ND (0.37)	ND (0.39)	-	-	-
Quinoline	ug/l	ND (0.21)	-	ND (0.20)	ND (0.21)	-	-	-
GC/LC Semi-volatiles (EPA 608.[3])								
Aldrin	ug/l	-	ND (0.0030)	-	-	ND (0.0030)	ND (0.0030)	ND (0.0030)
alpha-BHC	ug/l	-	ND (0.0030)	-	-	ND (0.0030)	ND (0.0030)	ND (0.0030)

## 2018 Through 2020 Leachate Results Table

750 Cliff Road, Port Reading, New Jersey

Sample ID:		L1-LEACHATE	LEACHATE	L1-LEACHATE	L1-LEACHATE	L1-LEACHATE	INFLUENT	L1-LEACHATE
Lab Sample ID:		JC65089-1	JC68430-1	JC75667-1	JC90256-1	JC97090-1	JD823-1	JD1977-1
Date Sampled:		4/27/2018	6/20/2018	10/10/2018	6/20/2019	10/18/2019	12/23/2019	1/20/2020
Matrix:		Water	Water	Water	Water	Water	Influent	Water
beta-BHC	ug/l	-	ND (0.0028)	-	-	ND (0.0028)	ND (0.0028)	ND (0.0028)
delta-BHC	ug/l	-	ND (0.0023)	-	-	ND (0.0023)	ND (0.0023)	ND (0.0023)
gamma-BHC (Lindane)	ug/l	-	0.0076 J	-	-	ND (0.0014)	ND (0.0014)	ND (0.0014)
Chlordane	ug/l	-	ND (0.057)	-	-	ND (0.057)	ND (0.057)	ND (0.057)
Dieldrin	ug/l	-	ND (0.0018)	-	-	ND (0.0018)	ND (0.0018)	ND (0.0018)
4,4'-DDD	ug/l	-	ND (0.0019)	-	-	ND (0.0019)	ND (0.0019)	ND (0.0019)
4,4'-DDE	ug/l	-	ND (0.0031)	-	-	ND (0.0031)	ND (0.0031)	ND (0.0031)
4,4'-DDT	ug/l	-	ND (0.0025)	-	-	ND (0.0025)	ND (0.0025)	ND (0.0025)
Endrin	ug/l	-	ND (0.0025)	-	-	ND (0.0025)	ND (0.0025)	ND (0.0025)
Endosulfan sulfate	ug/l	-	ND (0.0026)	-	-	ND (0.0026)	ND (0.0026)	ND (0.0026)
Endrin aldehyde	ug/l	-	ND (0.0026)	-	-	ND (0.0026)	ND (0.0026)	ND (0.0026)
Endosulfan-I	ug/l	-	ND (0.0025)	-	-	ND (0.0025)	ND (0.0025)	ND (0.0025)
Endosulfan-II	ug/l	-	ND (0.0021)	-	-	ND (0.0021)	ND (0.0021)	ND (0.0021)
Heptachlor	ug/l	-	ND (0.0019)	-	-	ND (0.0019)	ND (0.0019)	ND (0.0019)
Heptachlor epoxide	ug/l	-	ND (0.0033)	-	-	ND (0.0033)	ND (0.0033)	ND (0.0033)
Methoxychlor	ug/l	-	ND (0.0028)	-	-	ND (0.0028)	ND (0.0028)	ND (0.0028)
Toxaphene	ug/l	-	ND (0.092)	-	-	ND (0.092)	ND (0.092)	ND (0.092)
Aroclor 1016	ug/l	-	ND (0.17)	-	-	ND (0.096)	ND (0.098)	ND (0.098)
Aroclor 1221	ug/l	-	ND (0.15)	-	-	ND (0.21)	ND (0.21)	ND (0.21)
Aroclor 1232	ug/l	-	ND (0.10)	-	-	ND (0.13)	ND (0.13)	ND (0.13)
Aroclor 1242	ug/l	-	ND (0.14)	-	-	ND (0.11)	ND (0.11)	ND (0.11)
Aroclor 1248	ug/l	-	ND (0.13)	-	-	ND (0.062)	ND (0.063)	ND (0.063)
Aroclor 1254	ug/l	-	ND (0.17)	-	-	ND (0.20)	ND (0.21)	ND (0.21)
Aroclor 1260	ug/l	-	ND (0.14)	-	-	ND (0.075)	ND (0.076)	ND (0.076)
GC/LC Semi-volatiles (SW846 8081B)								
Mirex	ug/l	-	ND (0.0023)	-	-	ND (0.0023)	ND (0.0023)	ND (0.0023)
GC/LC Semi-volatiles (SW846 8141B)								
Chlorpyrifos	ug/l	-	ND (0.55)	-	-	ND (0.66)	ND (0.55)	ND (0.55)
Demeton	ug/l	-	ND (0.76)	-	-	ND (0.91)	ND (0.76) <sup>b</sup>	ND (0.76)
Ethyl Parathion	ug/l	-	ND (0.53)	-	-	ND (0.64)	ND (0.53)	ND (0.53)
Malathion	ug/l	-	ND (0.41)	-	-	ND (0.49)	ND (0.41) <sup>b</sup>	ND (0.41)
Methyl Azinphos (Guthion)	ug/l	-	ND (0.37)	-	-	ND (0.44) <sup>b</sup>	ND (0.37) <sup>b</sup>	ND (0.37)
Metals Analysis								
Antimony	ug/l	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	ug/l	3.7	7	4.2	6.3	14.4	<3.0	3.9
Barium	ug/l	<200	-	<200	-	-	-	-
Beryllium	ug/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	ug/l	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Chromium	ug/l	<10	<10	<10	<10	<10	<10	<10
Cobalt	ug/l	<50	-	<50	-	-	-	-
Copper	ug/l	-	12.5	-	15.2	<10	17.2	<10
Iron	ug/l	-	6600	-	13600	20200	1770	-
Lead	ug/l	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Mercury	ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/l	342	201	244	95.2	177	152	208
Selenium	ug/l	<10	<10	<10	<10	<10	<10	<10
Silver	ug/l	-	<10	-	<10	<10	<10	<10
Thallium	ug/l	-	<2.0	-	<1.0	<0.50	<0.50	<0.50
Vanadium	ug/l	<50	-	<50	-	-	-	-
Zinc	ug/l	-	218	-	112	210	201	304
General Chemistry								
Chloride	ug/l	-	19200	-	-	35900	8300	22800
Cyanide	ug/l	-	<10	-	-	<10	<10	<10
Nitrogen, Ammonia	ug/l	-	-	-	2200	6300	<200	-
Phenols	ug/l	-	<200	-	-	<200	<200	<200
Footnotes:								
<sup>a</sup> This compound in BS is outside in house QC limits bias high.								
<sup>b</sup> Associated CCV outside of control limits high, sample was ND.								
<sup>c</sup> Associated CCV outside of control limits high, sample was ND. This compound in BS is outside in house QC limits bias high.								
<sup>d</sup> The percent recovery for this compound in the associated BS is below in-house control limits indicating potential low bias.								
<sup>e</sup> Associated CCV outside of control limits low.								
<sup>f</sup> This compound is outside the control limits biased high in the associated BS.								
<sup>g</sup> This compound in BS is outside in house QC limits bias low.								
<sup>h</sup> This compound is outside the control limits biased low in the associated BS. Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.								
<sup>i</sup> Associated CCV outside of control limits high,sample was ND.								
<sup>j</sup> The spike standard was not added in LCS.								

## **Exhibit E**

Earth Systems, Inc. – Public Notice June 2020

NOTICE is hereby given that pursuant to N.J.A.C 7:14A-6.13(d)3, Hess Corporation intends to submit a request for authorization under the General Groundwater Petroleum Product Clean-up Permit No. NJ0102709 to the New Jersey Department of Environmental Protection. This authorization will allow the Hess Corporation – Former Port Reading Refinery, AOC 3: No. 1 Landfarm, located at 750 Cliff Road, Port Reading, New Jersey to discharge treated groundwater from the remediation projects into select surface waters of the State.

**Star Ledger**

*Phone:* 732-902-4318

*Fax:* 732-243-2750

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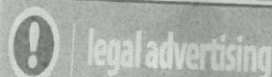


# The Star-Ledger

PAGE C-2

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Friday, June



## ! notices

### Earth Systems, Inc. - Public Notice June 2020

NOTICE is hereby given that pursuant to N.J.A.C. 7:14A-6.13(d)3, Hess Corporation intends to submit a request for authorization under the General Groundwater Petroleum Product Clean-up Permit No. NJ0102709 to the New Jersey Department of Environmental Protection. This authorization will allow the Hess Corporation - Former Port Reading Refinery, AOC 3; No. 1 Landfarm, located at 750 Cliff Road, Port Reading, New Jersey to discharge treated groundwater from the remediation projects into select surface waters of the State.  
6/19/2020 \$29.45

### MIDDLESEX COUNTY JOINT HEALTH INSURANCE FUND

#### COMMISSIONERS MEETING

PLEASE TAKE NOTICE: Middlesex County Joint Health Insurance Fund Commissioners meeting scheduled for June 23, 2020 will be held telephonically. If you are interested in attending, please contact Lynn Collins at l.collins@naimc.com for meeting call in information.  
6/19/20 \$21.70

DOCKET NO.: L-1805-20  
IN THE MATTER OF THE APPLICATION OF Gianna Figliolino TO ASSUME THE NAME OF Gianna Nieves Figliolino  
TO WHOM IT MAY CONCERN:  
Take notice that the undersigned will apply to Union County Superior Court on the 10th day of July 2020 at 9:00 o'clock in the morning, at the Court House in the City of Elizabeth, New Jersey, for a judgment authorizing Gianna Figliolino to assume the name of Gianna Nieves Figliolino.  
6/19/2020 \$24.80

### LEGAL NOTICE STATE OF NEW JERSEY DEPARTMENT OF HUMAN SERVICES DIVISION OF MEDICAL ASSISTANCE AND HEALTH SERVICES

NOTICE OF PUBLIC MEETING  
INVITATION TO ATTEND VIRTUAL MEETING  
\*NOTICE OF REVISED MEETING INFORMATION\*  
TAKE NOTICE that the Department of Human Services, Division of Medical Assistance and Health Services (DMAHS) previously announced a series of public meetings of the New Jersey Drug Utilization Review

BOROUGH OF NORTH CALDWELL  
PLANNING BOARD NOTICE  
TAKE NOTICE that on the 29th day of June, 2020, at 8:00 o'clock P.M., a public hearing will be held before the Borough of North Caldwell Planning Board REMOTELY using a video and/or audio link and/or telephone dial in as required and permitted during the COVID-19 State of Emergency, on the application of 21-25 Bloomfield Avenue, LLC ("Applicant") requests the approval an application for preliminary and final site plan approval with bulk variance relief to construct a mixed-use building with four (4) residential units above commercial space. In connection with the application, the Applicant seeks variance relief for: (a) minimum front footage; (b) minimum lot size; (c) minimum front yard setback; and (d) minimum setback from rear or side line for an accessory building, together with any and all variances, waivers or de minimis exceptions, including minimum size parking stall, parking within front yard and off street loading space, that may come before the Planning Board during the course of public hearing. The property that is the subject of the application is known as 21 Bloomfield Avenue,

### AMENDED DELEGATE ASSEMBLY MEETING NOTICE New Jersey School Boards Association Trenton, New Jersey

Due to health and safety concerns for the public regarding COVID-19, and pursuant to N.J.S.A. 10:4-6 et seq., known as the "Open Public Meetings Act," the NJSBA hereby gives notice that the Delegate Assembly meeting scheduled on June 27, 2020 at 9:00 A.M. will be conducted by video conference and telephone. Pre-registered delegates will be provided a link to the assembly. Guests and the public may call in by dialing: 1-415-655-0002 - Access code: 127 916 8886  
6/19/2020 \$32.55

### NOTICE OF INTENT TO ABANDON RAIL SERVICE AB-290 (Sub-No. 408X)

Norfolk Southern Railway Company ("NSR") gives notice that on or about June 19, 2020, it intends to file with the Surface Transportation Board ("Board"), Washington, DC 20423, a petition for exemption pursuant to 49 C.F.R Part 1152 Subpart G and 49 U.S.C. 10502 from the prior approval

### NORTH HUNTERDON-VOORHEES REGIONAL HIGH SCHOOL DISTRICT BOARD OF EDUCATION ANNANDALE, NJ

SPECIAL MEETING NOTICE  
The North Hunterdon-Voorhees Regional High School District Board of Education will hold a special meeting in regards to personnel matters on Tuesday, June 23, 2020 at 5:30 p.m. Due to the COVID 19 pandemic this meeting will be held virtually. The Board of Education meetings are open to the public and include an opportunity for the public to address the Board.  
6/19/2020 \$27.90

### PUBLIC NOTICE

### CITY OF HOBOKEN, N.J. ALCOHOLIC BEVERAGE CONTROL BOARD

A MEETING OF THE ALCOHOLIC BEVERAGE CONTROL BOARD OF THE CITY OF HOBOKEN, NEW JERSEY WILL BE HELD ON THURSDAY, JUNE 25, 2020 AT 6:00 P.M.

PLEASE BE ADVISED THAT AS A RESULT OF THE CURRENT STATE OF EMERGENCY BECAUSE OF THE COVID-19 OUTBREAK AND IN ORDER

### NORWOOD BOARD OF EDUCATION NORWOOD, NJ 0764

Pursuant to the Public Meeting Chapter 231, Laws of New Jersey, Notice is hereby given of a Special Meeting of the Norwood Board of Education on Thursday, June 18, 2020 at 7:00pm for the purpose of this meeting is to go into Executive Session to evaluate Superintendent. This meeting will be held in the NPS Library, 177 Street.  
Victor Anaya  
School Business Administrator  
06/18/2020  
6/19/2020 \$27.90

### NOTICE OF DECISION

On Monday, June 8, 2020 the Planning Board of Adjustment of the Township of Springfield granted a site plan with bulk variance ("Approval") to Laura Gamaral for the property located at 52 Treetop Drive, designated as Block 2073, Lot 2 on the Maps of Springfield, New Jersey ("Property"). The Property is located in the RS-120 Zone District ("RS-120 Zone") and the Approval allows the Applicant to demolish the existing

## **Exhibit F**



## SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

## 1. Article Addressed to:

Rich Lorentzen, Sewer Utility Admin  
Woodbridge Municipal Building  
1 Main Street  
Woodbridge, NJ 07095



9590 9402 5905 0049 5065 62

## 2. Article Number (Transfer from service label)

7019 1640 0000 9353 1333

PS Form 3811, July 2015 PSN 7530-02-000-9053

## COMPLETE THIS SECTION ON DELIVERY

## A. Signature

X *R.F. Duffy* ☒ Agent ☐ Addressee

## B. Received by (Printed Name)

R.F. DUFFY

## C. Date of Delivery

6-18-20

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

## 3. Service Type

- |  |   |
|--|---|
| <input type="checkbox"/> Adult Signature                               | <input type="checkbox"/> Priority Mail Express®                     |
| <input type="checkbox"/> Adult Signature Restricted Delivery           | <input type="checkbox"/> Registered Mail™                           |
| <input type="checkbox"/> Certified Mail®                               | <input type="checkbox"/> Registered Mail Restricted Delivery        |
| <input type="checkbox"/> Certified Mail Restricted Delivery            | <input type="checkbox"/> Return Receipt for Merchandise             |
| <input type="checkbox"/> Collect on Delivery                           | <input type="checkbox"/> Signature Confirmation™                    |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery       | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Insured Mail                                  |   |
| <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500) |   |

Domestic Return Receipt

## SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

## 1. Article Addressed to:

Ms. Lisa Oberreiter, Wastewater Plant  
Middlesex County Utilities Authority  
2571 Main Street Extension  
P.O. Box 159  
Sayreville, NJ 08872



9590 9402 5905 0049 5065 48

## 2. Article Number (Transfer from service label)

9 1640 0000 9353 1319

PS Form 3811, July 2015 PSN 7530-02-000-9053

## COMPLETE THIS SECTION ON DELIVERY

## A. Signature

X *Michael W. Honeymaker* ☐ Agent ☐ Addressee

## B. Received by (Printed Name)

## C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

## 3. Service Type

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|--|---|
| <input type="checkbox"/> Adult Signature                               | <input type="checkbox"/> Priority Mail Express®                     |
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| <input type="checkbox"/> Certified Mail®                               | <input type="checkbox"/> Registered Mail Restricted Delivery        |
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| <input type="checkbox"/> Collect on Delivery                           | <input type="checkbox"/> Signature Confirmation™                    |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery       | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Insured Mail                                  |   |
| <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500) |   |

Domestic Return Receipt

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- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

## 1. Article Addressed to:

John M. Mitch, Municipal Clerk  
Woodbridge Municipal Building  
1 Main Street  
Woodbridge, NJ 07095



9590 9402 5905 0049 5065 24

## 2. Article Number (Transfer from service label)

7019 1640 0000 9353 1326

PS Form 3811, July 2015 PSN 7530-02-000-9053

## COMPLETE THIS SECTION ON DELIVERY

## A. Signature

X *R.F. Duffy* ☒ Agent ☐ Addressee

## B. Received by (Printed Name)

R.F. DUFFY

## C. Date of Delivery

6-18-20

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

## 3. Service Type

- |  |   |
|--|---|
| <input type="checkbox"/> Adult Signature                               | <input type="checkbox"/> Priority Mail Express®                     |
| <input type="checkbox"/> Adult Signature Restricted Delivery           | <input type="checkbox"/> Registered Mail™                           |
| <input type="checkbox"/> Certified Mail®                               | <input type="checkbox"/> Registered Mail Restricted Delivery        |
| <input type="checkbox"/> Certified Mail Restricted Delivery            | <input type="checkbox"/> Return Receipt for Merchandise             |
| <input type="checkbox"/> Collect on Delivery                           | <input type="checkbox"/> Signature Confirmation™                    |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery       | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Insured Mail                                  |   |
| <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500) |   |

Domestic Return Receipt



June 16, 2020

**Via Certified Mail**  
Return Receipt Requested

Ms. Lisa Oberreiter, Wastewater Plant Superintendent  
Middlesex County Utilities Authority  
2571 Main Street Extension  
P.O. Box 159  
Sayreville, NJ 08872

**Re: Notice of Intent to Discharge Treated Groundwater under the New Jersey Pollution Discharge Elimination System (NJPDES) General Permit – Cat. B4B  
Hess Corporation – Former Port Reading Refining Facility, AOC 3: No. 1 Landfarm  
750 Cliff Road, Port Reading, Woodbridge Township  
Middlesex County, New Jersey 07064  
NJDEP PI #: 006148  
ISRA Case #: E20130449  
EPA ID #: NJD045445483**

Dear Ms. Lisa Oberreiter,

Earth Systems, Inc (Earth Systems), on behalf of Hess Corporation (Hess), is providing the enclosed permit application to initiate a discharge to surface water from the No.1 Landfarm, a Resource Conservation and Recovery Act (RCRA) regulated unit at the above referenced facility. The discharged water will be generated by de-watering activities associated with the remediation (capping) of the No. 1 Landfarm unit, and will be treated prior to discharge via a temporary treatment system. The activities are to be conducted under the direction of the New Jersey Department of Environmental Protection (NJDEP). The treated water will be discharged to the North Drainage Ditch, a tidal tributary to the Arthur Kill, the water flow will be monitored with a meter. This activity is to be performed as part of the State of New Jersey NJPDES program (New Jersey Administrative Code N.J.A.C. 7:14A). The discharge will be produced as a result of petroleum clean-up activities under NJPDES General Permit No. NJ0102709 – Category B4B (Petroleum Product Cleanup).

Per N.J.A.C. 7:14A-4.3(a)13 requiring notification to the municipality and affected sewerage authority, this correspondence serves as Hess's notification. Per N.J.A.C. 7:14A-4.3(a)13 we are required to notify the municipality and sewerage authority, and you must submit to the NJDEP written comments regarding or objections to the proposed discharge or activity within 30 days of receipt of said notice.

If you have any questions or need additional information, please contact me at (732) 739-6444. I can also be reached via email at [bwilliams@earthsys.net](mailto:bwilliams@earthsys.net).

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Williams".

Bill Williams  
Project Manager



Cc: Mr. Phil Cole, NJDEP (electronic copy)  
Mr. Andrew Park, USEPA (electronic copy)  
Mr. John Schenkewitz, Hess Corporation (electronic copy)  
Mr. Rick Ofsanko, Earth Systems, Inc. (electronic copy)  
Mr. John Virgie, Earth Systems, Inc. (electronic copy)  
Mr. Albert Roscioli, Rubicon Environmental (electronic copy)

**Enclosures:**

- Hess Corporation – Former Port Reading Refining Facility, AOC 3: No. 1 Landfarm New Jersey Pollution Elimination System (NJPDES) Permit Application, June 2020



June 16, 2020

**Via Certified Mail**  
Return Receipt Requested

John M. Mitch, Municipal Clerk  
Woodbridge Municipal Building  
1 Main Street  
Woodbridge, NJ 07095

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Hess Corporation – Former Port Reading Refining Facility, AOC 3: No. 1 Landfarm  
750 Cliff Road, Port Reading, Woodbridge Township  
Middlesex County, New Jersey 07064  
NJDEP PI #: 006148  
ISRA Case #: E20130449  
EPA ID #: NJD045445483**

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Mr. John Virgie, Earth Systems, Inc. (electronic copy)  
Mr. Albert Roscioli, Rubicon Environmental (electronic copy)

**Enclosures:**

- Hess Corporation – Former Port Reading Refining Facility, AOC 3: No. 1 Landfarm New Jersey Pollution Elimination System (NJPDES) Permit Application, June 2020



June 16, 2020

**Via Certified Mail**  
Return Receipt Requested

Rich Lorentzen, Sewer Utility Administrator  
Woodbridge Municipal Building  
1 Main Street  
Woodbridge, NJ 07095

**Re: Notice of Intent to Discharge Treated Groundwater under the New Jersey Pollution Discharge Elimination System (NJPDES) General Permit – Cat. B4B  
Hess Corporation – Former Port Reading Refining Facility, AOC 3: No. 1 Landfarm  
750 Cliff Road, Port Reading, Woodbridge Township  
Middlesex County, New Jersey 07064  
NJDEP PI #: 006148  
ISRA Case #: E20130449  
EPA ID #: NJD045445483**

Dear Mr. Rich Lorentzen,

Earth Systems, Inc (Earth Systems), on behalf of Hess Corporation (Hess), is providing the enclosed permit application to initiate a discharge to surface water from the No.1 Landfarm, a Resource Conservation and Recovery Act (RCRA) regulated unit at the above referenced facility. The discharged water will be generated by de-watering activities associated with the remediation (capping) of the No. 1 Landfarm unit, and will be treated prior to discharge via a temporary treatment system. The activities are to be conducted under the direction of the New Jersey Department of Environmental Protection (NJDEP). The treated water will be discharged to the North Drainage Ditch, a tidal tributary to the Arthur Kill, the water flow will be monitored with a meter. This activity is to be performed as part of the State of New Jersey NJPDES program (New Jersey Administrative Code N.J.A.C. 7:14A). The discharge will be produced as a result of petroleum clean-up activities under NJPDES General Permit No. NJ0102709 – Category B4B (Petroleum Product Cleanup).

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**Enclosures:**

- Hess Corporation – Former Port Reading Refining Facility, AOC 3: No. 1 Landfarm New Jersey Pollution Elimination System (NJPDES) Permit Application, June 2020



## **Exhibit G**

## Exhibit G:

### Proposed Effluent Sampling Protocol

Based on the current and historic leachate sampling data provided in Exhibit D, the following is the proposed effluent sampling protocol associated with the enclosed NJPDES B4B permit application.

**Proposed Surface Water DMR Limits and Monitoring Requirements Table**

Parameter	Sample Point	Limit	Limit	Units	Frequency	Sample Type
Flow	Effluent	Report Monthly Average	Report Daily Maximum	GPD	1/Month	Metered
pH	Effluent	6.0 Monthly Minimum	9.0 Monthly Maximum	SU	1/Quarter	Grab
Total Suspended Solids (TSS)	Effluent	Report Monthly Average	40 Daily Maximum	mg/l	1/Month	Grab
Total Organic Carbon (TOC)	Effluent	Report Monthly Average	20 Daily Maximum	ug/l	1/Month	Grab
Nickel	Effluent	50 Monthly Average	100 Daily Maximum	ug/l	1/Month	Grab
Zinc	Effluent	100 Monthly Average	200 Daily Maximum	ug/l	1/Month	Grab